

## **FAO DESERT LOCUST BULLETIN No. 147**

### **GENERAL SITUATION DURING NOVEMBER 1990 FORECAST UNTIL MID JANUARY 1991**

**The Desert Locust situation remained calm during November with the only significant report of locusts from Tunisia. Scattered adults were reported on the coast of Oman and the Red Sea coast of Sudan. In late October, a small immature swarm was seen in the Khipro Desert of Pakistan. No further information was received about the locust populations reported last month on the southern coast of Yemen. Elsewhere, scattered adults continued to be present in West Africa.**

In early November, control operations were reported to be in progress against late instar gregarious hoppers and less gregarious adults on 15,000 ha in central Tunisia. These populations may have been a result of adults moving from the Sahel in early September and laying on rains received during the second decade of September. Current populations will mature very slowly due to cold temperatures and no breeding or migration is expected during the forecast period. Small numbers of adults are likely to be present in central Algeria and southern Morocco where they may breed in areas of green vegetation.

Scattered adults were present on the Batinah coast of Oman in mid-November. These are almost certainly arrivals from the Indo-Pakistan summer monsoon breeding area and may breed on a small scale if rainfall occurs during the forecast period. Similar populations may be present in Fujairah of UAE. Although no further information was received of locusts along the Gulf of Aden, it is likely that small numbers of adults are present on the northern coastal plains of Somalia and perhaps Djibouti and will breed in areas of recent rainfall.

Scattered adults were present on the southern Red Sea coast of Sudan and small numbers of adults are likely to be present along the Red Sea coasts of Saudi Arabia and Yemen where breeding will occur during the forecast period.

In West Africa, scattered adults and a few hoppers were present in central and western Mauritania and central Mali where they are likely to remain during the forecast period. Similar populations are likely to be present in areas of green vegetation in the Adrar des Iforas and Tamensa of Mali and in Air and Tamensa of Niger. These adults will persist and are not likely to move north except during periods of warm southerlies associated with Mediterranean depressions.

A late report was received of an immature swarm in the end of October in the Khipro Desert of Pakistan. Control operations were undertaken. Further movement toward the west is not likely during the forecast period due to cold temperatures.



## WEATHER AND ECOLOGICAL CONDITIONS

During November, eastward moving Mediterranean depressions, preceded by southerly winds, occurred through-out the entire month. METEOSAT imagery indicated substantial clouds over Morocco extending to Algeria, Tunisia, and Libya from 2-6th. ARTEMIS imagery suggested that widespread rains may have fallen in Morocco south to 26°N and in Oued Draa, in south-west and central Algeria from Tindouf and the Grand Erg Occidental to the Tidikelt Plain, Tademait Plateau and Grand Erg Oriental, in Tunisia, and in Tripolitania and northern Al Hammadat Al Hamra of Libya. Additional rain may have occurred in the south-eastern Libyan Desert from Al Kufrah Oasis to Faraira Oasis in the Western Desert of Egypt and as far east as the central areas of the Eastern Desert. During the second decade, METEOSAT imagery indicated substantial clouds over the Grand Erg Oriental of Algeria to Al Hammadat Al Hamra and the south-eastern desert of Libya on 11-13th. ARTEMIS imagery and the Bracknell model suggested that localized light rainfall may have occurred in these areas, while becoming widespread and heavy in the Jebel Akhdar area of north-eastern Libya. METEOSAT imagery indicated a substantial cloud mass over north-eastern Libya on 28-29th. Vegetation conditions are likely to be improving in areas that received rainfall.

METEOSAT imagery indicated medium to upper level clouds over the coasts of Mauritania and southern Morocco during the first decade of November extending into central Mauritania by the second decade and reaching Libya during the third decade. However, these are not expected to produce significant rain as suggested by the Bracknell model. Similar clouds were seen over Chad from Lake Chad to northern Sudan and south-eastern Egypt during the second decade. A substantial cloud mass was seen over the Mauritanian coast on 22-26th. Traces of rain fell in Nouakchott on the 26th.

METEOSAT imagery indicated significant clouds over the northern Tihama of Saudi Arabia north of Yanbu during one day of the first decade of November and localized thunderstorms near the foothills of the Qunfudah Tihama and on the Red Sea coast of Sudan near Suakin on the 28th. Breeding conditions are improving in some wadis along the Red Sea coast of Sudan and the Tihama of Saudi Arabia and Yemen. Aerial surveys in early November indicated that vegetation was generally dry on the Red Sea Coast of Sudan except in localized areas north of Port Sudan and north-west of Sinkat.

METEOSAT imagery indicated significant clouds over the Bari region of north-eastern Somalia on 1 November which was a continuation of the depression seen during the end of October. As a result, it is likely that conditions are favourable for breeding. Vegetation conditions were reported to be dry in Djibouti in early November.

METEOSAT imagery indicated a significant cloud mass near the southern Batinah coast of Oman on the 29-30th which may have produced light rain.



## AREA TREATED IN NOVEMBER 1990

India (16-31 October)	242 ha
Pakistan (16-31 October)	details not available
Tunisia	2,800 ha



## WEST AFRICA

### MAURITANIA

During the first decade of November, isolated adults were seen in Assaba near Boumdeid, in Trarza north of Boutilimit, and in Tagant north and north-west of Tidjikja. Isolated hoppers were seen in Tagant on the 3rd and 6th. A few isolated adults were seen north of Dagana at 1646N/1523W on the 23rd.

### MALI

Scattered immature adults and late instar hoppers were seen at several locations, at densities up to 300 per ha within areas ranging from 5-500 ha, south of Gourma during the first decade of November.

### NIGER

A late report was received stating that isolated immature and mature adults were present at a few locations in Tamesna and Air during the last decade of September and the first decade of October. On 20 October, scattered adults and a few fifth instar hoppers, at a density of 1 per 10 sq. m., were seen along 2 km in Anou Makkerene (1807N/0744E). There was also an unconfirmed report of higher density adults and gregarious hoppers 100 km north of In-Abangharit.

### CHAD

No Desert Locusts were seen during surveys near Mongo (1211N/1842E) and Bitkine (1159N/1813E) in Guera and near Mangalme (1221N/1937E) in south-eastern Batha up to 28 November.

**No locust information had been received from other countries in the region up to 30 November.**

## NORTH-WEST AFRICA

### TUNISIA

Late instar gregarious hoppers and less gregarious adults were reported on 15,000 ha near Gafsa at Bahloula and Alim, near Kebili at Chareb, and near Tozeur at Remitha during the first half of November. Control operations had treated 2,800 ha by 13 November.

**No locust information had been received from countries in the region up to 30 November.**

## EASTERN AFRICA

### SUDAN

Scattered mature adults, at a density of 1 per ha, were reported on 200 ha in Tokar Delta (1826N/3745E) on 21 November.

### ETHIOPIA

No locusts were seen along the Red Sea coast during the first half of October.

**DJIBOUTI**

No locusts were reported up to 2 November.

**SOMALIA**

No surveys were conducted in the northern region up to 2 November. Ground surveys were reported to commence in late November from Bosaso (1117N/4912E) west to Las Koreh (1110N/4815E).

**KENYA, TANZANIA, and UGANDA**

The locust situation was reported calm up to 2 November.

**NEAR EAST****KINGDOM OF SAUDI ARABIA**

The situation was reported calm up to 30 November.

**YEMEN**

The situation was reported calm up to 30 November.

**OMAN**

Scattered immature adults were reported on the Batinah coast near Muscat at Al-Qurm during the second decade of November. Surveys are in progress in other regions.

**No locust information had been received from other countries in the region up to 30 November.**

**SOUTH-WEST ASIA****PAKISTAN**

During the second half of October, a small immature swarm was reported to have split into three in the Khipro Desert on the 29th, settling at Kashmaro (2703N/6915E), Doitar (2642N/6912E), and Buthu (2603N/7001E), and measuring about 1 sq. km., 1.5 sq. km., and 4 sq. km., respectively. Aerial and ground control operations were undertaken. Elsewhere, scattered adults, at densities up to 225 per sq. km., were present in Mekran west of Karachi, east of Sukkur, and in the Cholistan Desert.

**INDIA**

During the second half of October, small concentrations of immature adults and patches of hoppers were reported from 5 localities in Jaisalmer district. Scattered adults were also seen at a total of 6 localities in Bikaner, Nagaur, and Kutch Bhuj districts with a maximum density of 1,275 per sq. km. at Barju (2822N/7310E) in Bikaner district on the 17th.

No reports were received during November.

**IRAN**

No locusts were reported during September and October.

**AFGHANISTAN**

No locusts were reported during October.

**NEW ASSISTANCE REQUESTED**

No requests for assistance against Desert Locusts had been received up to 30 November.

**NEW ASSISTANCE PLEDGED**

No information regarding assistance had been received up to 30 November.

**ANNOUNCEMENTS**

As the grasshopper and locust situation has now reached normal proportions and the required surveillance and control activities can be carried out through the existing structures, the Director-General of FAO has decided to close the Emergency Centre for Locust Operations (ECLC) effective 31 December 1990. Any outstanding activities as of that date will be implemented under the existing Regular Programme procedures. All locust-affected countries should continue to send locust survey and control information to FAO/AGP using the same telex and fax numbers as before. The FAO Desert Locust Bulletin will continue to be published monthly.



## WEST AFRICA

### **MAURITANIA**

Small numbers of adults are likely to persist in western regions, primarily Trarza, Tagant, Inchiri, western Adrar, and Dakhlet Nouadhibou, and scattered adults may be present in Tiris-Zemmour.

### **MALI**

Small numbers of adults are likely to be present in wadis in the Adrar des Iforas and Tamesna.

### **NIGER**

Small numbers of adults are likely to persist in wadis in Tamesna and Air.

### **CHAD**

Small numbers of adults are likely to be present in Tibesti.

### **BURKINA FASO, CAMEROON, GAMBIA, GUINEA BISSAU, GUINEA CONAKRY, and SENEGAL**

No significant developments are likely and no invasions are expected.

## NORTH-WEST AFRICA

### **MOROCCO**

Small numbers of adults are likely to be present south of the Atlas in Oued Draa and in the extreme south-western parts of the Sahara where they may breed in areas of green vegetation. Small numbers of adults may move into these areas from the Sahel during periods of warm southerly winds.

### **ALGERIA**

Small numbers of adults are likely to be present in wadis and other run-off areas of Tademait Plateau, Tidikelt Plain, Adrar N'Ahnet, and Monts du Mouydir where they may breed in areas of green vegetation. Small numbers of adults may move into these areas from the Sahel during periods of warm southerly winds.

### **TUNISIA**

Any adults escaping current control operations will persist near Gafsa, Tozeur, and Kebili; however, further breeding is not likely to occur.

### **LIBYA**

Small numbers of adults may be present in the Fezzan and Al Hammadat Al Hamra where recent rains may have fallen.

## EASTERN AFRICA

### **SUDAN**

Small scale breeding will occur along the Red Sea coast and in northern sub-coastal areas such as Wadi Oko/Diib.

**ETHIOPIA**

Small numbers of adults may occur in wadis and green areas along the Eritrean coast.

**SOMALIA**

Small numbers of adults are likely to be present on the northern coastal plains and will breed in areas of recent rainfall.

**DJIBOUTI**

Small numbers of adults may be present on the coastal plains and may breed in areas that receive rain.

**KENYA, TANZANIA, and UGANDA**

No significant developments are likely and no invasions are expected.

## NEAR EAST

**KINGDOM OF SAUDI ARABIA**

Small numbers of adults are likely to be present on the southern Tihama from Lith to the Yemen border where they will breed on a small scale in areas of green vegetation.

**YEMEN**

Small numbers of adults are likely to be present on the Tihama and the coastal plains west of Aden where they will breed on a small scale in areas of green vegetation.

**EGYPT**

A few adults may be present in the extreme south-eastern desert.

**OMAN**

Small numbers of adults will persist on the Batinah coast and may breed if rainfall occurs.

**UAE**

Small numbers of adults may be present in Fujairah.

**BAHRAIN, IRAQ, ISRAEL, JORDAN, KUWAIT, LEBANON, QATAR, SYRIA, and TURKEY**

No significant developments are likely and no invasions are expected.

## SOUTH-WEST ASIA

**PAKISTAN**

Small to moderate numbers of adults are likely to be present in Baluchistan and Mekran; only scattered adults are likely to remain in Cholistan and Tharparkar deserts.

**INDIA**

Small numbers of adults will persist in Rajasthan; however, further breeding is not likely to occur.

**IRAN**

Small numbers of adults may be present in the provinces of Sistan and Baluchistan.

**AFGHANISTAN**

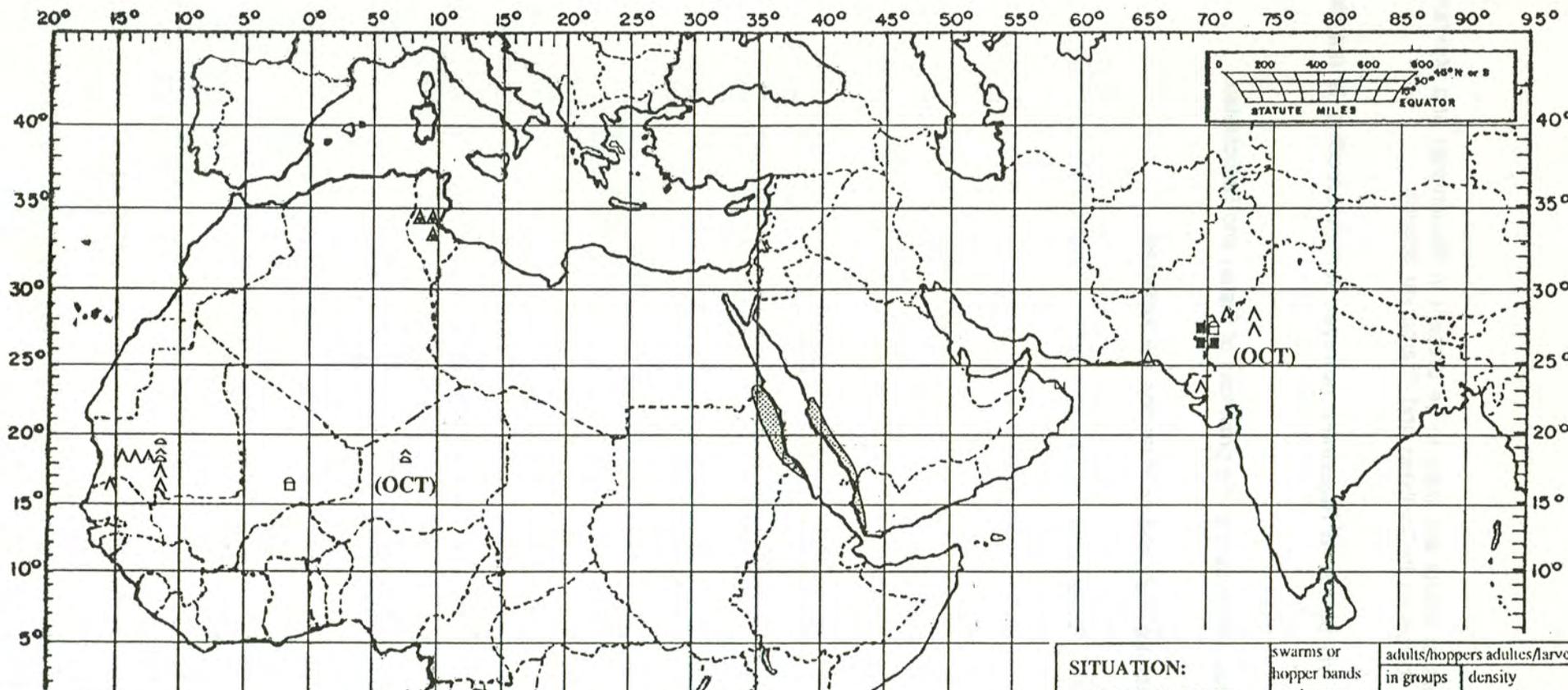
No significant developments are likely and no invasions are expected.

*3 December 1990*



# Desert Locust: summary Criquet Pèlerin: situation résumée

No. 147



FORECAST TO: PREVISION AU: <b>15.1.91</b>	LIKELY / PROBABLE	POSSIBLE POSSIBLE
current undetected breeding / reproduction en cours non détectées		
major swarm(s) / essaim(s) importantant(s)		
minor swarm(s) / essaim(s) limité(s)		
non swarm / aîlés non essaimant		

SITUATION: <b>NOVEMBER 1990</b>	swarms or hopper bands essaims ou bandes larvaires	adults/hoppers adultes/larves in groups en groupes	density low/unknown densité faible/inconnue
	immature adults aîlés immatures		
mature or partly mature adults aîlés matures ou partiellement matures			
adults, maturity unknown aîlés, maturité inconnue			
egg laying or eggs pontes ou œufs			
hoppers larves			
hoppers & adults (combined symbol example) larves & adultes (exemple de symbole combiné)			